

Rajat Malik

Lead Software Engineer

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Skills

Frontend Technologies: React, Angular, JavaScript (ES6+), TypeScript, HTML5, CSS3, SASS/LESS, Redux, NgRx, Micro-front-end, NX.

AI & Productivity Tools: Generative AI (ChatGPT, Copilot), Prompt Engineering, AI-assisted Prototyping, Rapid Ideation with AI, Automation using AI-powered workflows.

Testing Frameworks: Jest, Jasmine, Karma.

UI Library: Material-UI, Bootstrap, PrimeNG, Chart.js, Plotly, Google map, Husky, Lint-staged, Angular Material, ngx-translate, dexie, gauge-chart, rm-ng-device-detection.

Cloud & DevOps: AWS, S3, Cognito, Docker, CICD, Git, Cloud Front, Webpack, Jira, Gitlab.

Tools & Methodologies: Agile/Scrum, JIRA, Confluence, Code Review, Performance Optimization.

Work Experience

Siemens, Gurugram

July 2021 - Present

Lead Software Engineer

- Spearheaded the **migration** of Angular legacy codebases to modern Angular and React, resulting in up to **40% improvement** in performance and developer productivity and scalability.
- Drove end-to-end architecture and implementation of scalable micro-frontend systems, enabling parallel development, faster releases, and a **60% reduction** in regression bugs.
- Optimized application performance from **20 to 97** Lighthouse scores through code splitting and lazy loading.
- Improved Core **Web Vitals** (LCP, FID, CLS) by **80%**, resulting in an improved user experience.
- Reduced runtime performance bottlenecks by 48% via proactive memory leak resolution and deep performance profiling.
- Achieved **90% unit test coverage** using the Jest framework and implemented an automated testing pipeline for early feedback.
- Achieved a **63% reduction** in release-time **bugs** by enhancing the robustness of the testing approach..
- Led cross-functional teams to design and implement micro-frontend architectures that **reduced deployment overhead** and enabled independent **module releases**.
- Effectively coordinated across cross-functional global teams, aligning stakeholders, solving blockers, and ensuring delivery with minimal supervision.
- Leveraged **AI-driven tools** (e.g., GitHub Copilot, ChatGPT) to accelerate prototyping, improve developer productivity, and enhance problem-solving during product development cycles.
- Rapidly built **AI-assisted prototypes** in hackathons (e.g., Product Jam 2025) within **4 hours**, applying user-centric **AI solutions to real-world problems**.
- **Key Achievement:** Sensformer won NASSCOM Technology Excellence Award in IoT.
- **Technologies:** **Micro-front-end**, AWS, S3, Docker, Angular, Jest, TypeScript, HTML5, SASS, NgRx, Plotly, Google Map, **OWASP**, RBAC, JWT, HTTPS best practices, sensitive data masking, **Accessibility**, WCAG 2.1 compliance, ARIA roles, keyboard navigation.

HCL Technologies, Noida

June 2016 - June 2021

Senior Lead Engineer

- Championed component-driven development and **reusable** design systems, cutting UI development time by **50%** across projects.
- Implemented advanced **state management** solutions Redux and reactive programming to enhance responsiveness and UX **consistency**.
- Collaborated directly with product and UX teams, translating complex **business requirements into seamless user experiences**.
- The project had tight deadlines, making it both challenging and rewarding, with a steep learning curve I embraced.

- **Accessibility Standards:** WCAG 2.1 compliance, ARIA roles, keyboard navigation, and screen reader optimization.
- Implemented secure data access patterns and enforced strict role-based access control (RBAC) in customer portals, following OWASP guidelines.
- *Technologies:* React, Redux, HTML, CSS, GIT, Confluence, Jira, Node, Agile, Jasmine, Bootstrap, NPM.

ALLCAD, Jaipur

May 2015 - Jun 2016

Senior Software Engineer

- Owned development of the scanned DM module, enabling users to upload scanned documents via URL or image uploads.
- Proactively mentored junior developers and conducted regular code reviews, contributing to a **30% improvement** in overall code quality and team velocity.
- Integrated **accessibility** (WCAG 2.1), **internationalization** (i18n), and performance best practices into UI code, ensuring inclusive and global-ready applications.
- *Technologies:* AngularJS, HTML, CSS, GIT, jasmine, Karma, Node.

Praecepts Technologies And Services Private Limited

Aug 2013 - March 2015

Software Engineer

- Praecepts Technologies is a product-based startup. It is a Jaipur-based start-up. We are working on a healthcare product that is based on edge-cutting technology and features. According to BA analysis, it can extend an organization's profit by 2 digits%. We are very excited about the release of this awesome product. I am one of the leading team members for this product. It was my first chance to own and feel any responsibility in the organisation. I have been blessed with some of my serious team members' support; I have learned a lot from them.

GIPL Pvt Ltd.

Feb 2012 - July 2013

Software Engineer

ITech India Pvt. Ltd.

Aug 2011 - Jan 2012

Software associate

Education

Bachelor of Technology

B.Tech. in Computer Science and Engineering, AIT Ajmer, 2007-2012

Key Projects & Highlights

- **JSandbox – A modern JavaScript playground for rapid prototyping:** Conceived, designed, and built a responsive JavaScript playground inspired by RunJS—tailored for developers seeking an intuitive, high-performance environment for real-time code execution, debugging, and rapid experimentation.
The tool features ES6+ support, customizable UI components, and a seamless developer experience powered by minimal setup and instant feedback loops. This project reflects my deep passion for building practical software tools that simplify learning and empower developers.
- **Sensformer (Siemens):** Smart dashboard to monitor electrical assets using IoT and AWS. *Technologies:* Angular, HTML5, CSS3, TypeScript.
- **TES2 Royal Mail:** Enabled barcode tracking, map-based delivery proof & file downloads. *Technologies:* Angular, HTML5, CSS3, TypeScript.
- **AT&T Cart Integration:** Merged wireless & wireline carts, improving checkout UX and conversions. *Technologies:* Angular, HTML5, CSS3, JavaScript.
- Product Jam **AI Prototype** – Built a functional product prototype within 4 hours using AI-powered ideation and development workflows, showcasing problem clarity, user-centric design, and rapid execution.

Open Source & Writing Contributions

- **NPM Contribution:** Created 10+ Angular/React libraries published on npm and GitHub.
 - **Carousel:** A lightweight, optimized, and fully customizable Angular carousel component that is minimal in design yet powerful in features, built purely with Angular for seamless integration, smooth performance, and easy configuration.

- **Agent Detection:** Angular library to detect device type, operating system, and browser using the user agent - ideal for building responsive, device-aware, and adaptive web applications.
- **Authored:** 50+ articles on frontend architecture, performance, and developer productivity.
 - **10 Angular Performance Mistakes That Kill Your Application's Efficiency:** This article outlines key Angular performance mistakes developers often make, explaining how they affect efficiency and offering practical solutions to optimize your app's speed and responsiveness.
 - **Angular 20's New Superpowers Will Change How You Code Forever:** A detailed comparison guide highlighting key features introduced in Angular 20, offering insights into how they transform modern development practices.
 - **10 Best Practices to Boost Your Angular Application Performance:** This article presents 10 essential best practices to enhance the performance of Angular applications in 2024. Covers strategies to improve load times, optimize change detection, reduce bundle sizes, and build highly efficient, scalable apps.
 - Exploring AI in Frontend Development: Authored articles and insights on how AI can assist in rapid prototyping, developer productivity, and decision-making in product development.

Awards

- **Star Award – Siemens (2021):** Honored for leading the end-to-end implementation of a microfront-end architecture setup, from proof-of-concept to successful production deployment. Took full ownership of designing, developing, and integrating multiple independently deployable Angular microfrontends, enabling scalable development and faster release cycles across cross-functional teams.
- **Lead Helping Hand – HCL (2019):** Recognized for mentoring and leading new and existing team members, while consistently going above and beyond to foster cross-functional collaboration and effective communication, resulting in smoother onboarding and improved overall team performance.
- **Above & Beyond – HCL (2017):** Awarded for taking initiative beyond the defined role, successfully leading the delivery of critical modules on tight deadlines and earning the appreciation of the client.

Certificates

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| • React | • JS Essentials | • Git & GitHub | • JS Prototyping | • Cake PHP |
| • Angular | • Wired Parts of JS | • JS Design Patterns | • OOJS | • Express.js |

Interests

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|---------------------------------|--------------------------------------|---|
| • Micro Front-End Architecture. | • Article writing. | braries. |
| • Web Performance Optimization. | • Open-Source Contribution. | • Exploring AI-driven Development & Product Innovation. |
| • UI/UX Design Trends. | • Learning new technologies.ologies. | |
| • Mentoring Junior Developers. | • Design Systems & Component Li- | |